

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

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1. (Original) A mounting structure of a hybrid optical module comprising:
a movable member that is supported by at least two shafts,
a recording medium drive apparatus including a hybrid optical module having a light emitting and receiving device mounted on said movable member, and
a driving coil attached to said movable member,
said hybrid optical module being slid on said shafts so as to perform a tracking operation on an optical recording medium, wherein
a portion of said hybrid optical module which is closer to one of said shafts when said hybrid optical module is mounted on said movable member is cut out in substantially parallel with said shaft, and by an angle which is substantially equal to an incident angle of an optical path with respect to a tracking direction of the optical recording medium.
 2. (Original) The mounting structure of said hybrid optical module according to claim 1, wherein
a spindle motor is placed to be closer to one of said shafts in a direction of light incidence of an optical system including said hybrid optical module, and

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said hybrid optical module having a cut portion which is closer to another one of said at least two shafts is mounted with a pick-up unit.

3. (Original) The mounting structure of said hybrid optical module according to claim 1, wherein
the angle by which said portion of said hybrid optical module is cut out is in a range of 30° to 45° substantially.

4. (Original) A recording medium drive apparatus comprising:
a movable member that is supported by at least two shafts, and
a polygonal hybrid optical module having a light emitting and receiving device which is mounted on said movable member, and
a driving coil attached to said movable member,
said hybrid optical module being slid on said shafts so as to perform a tracking operation on a recording medium, wherein
a portion of said hybrid optical module which is closer to one of said shafts is cut out in substantially parallel with said shafts, and by an angle which is substantially equal to an incident angle of an optical path in a tracking direction of the recording medium.

5. (New) The mounting structure of said hybrid optical module according to claim 1, wherein the hybrid optical module integrates optical components.

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6. (New) The mounting structure of said hybrid optical module according to claim 5, wherein the optical components are formed on a substrate.

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7. (New) The mounting structure of said hybrid optical module according to claim 6, wherein the substrate and the optical components are housed in a package.

8. (New) The mounting structure of said hybrid optical module according to claim 7, wherein an area of the package, as viewed along a plane containing at least the two shafts, is smaller than an area of the moveable member, as viewed along the plane.

9. (New) The mounting structure of said hybrid optical module according to claim 1, wherein the hybrid optical module comprises:

a substrate;

a photo detector formed on the substrate;

a prism formed on the substrate;

a photo diode formed on the substrate; and

a laser diode formed on the substrate.

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10. (New) The mounting structure of said hybrid optical module according to claim 9, wherein the substrate, the photo detector, the prism, the photo diode, and the laser diode are housed in a package.

11. (New) The mounting structure of said hybrid optical module according to claim 10, wherein an area of the package, as viewed along a plane containing at least the two shafts, is smaller than an area of the moveable member, as viewed along the plane.

12. (New) The mounting structure of said hybrid optical module according to claim 1, wherein the hybrid optical module comprises a package containing optical components, and wherein an area of the package, as viewed along a plane containing at least the two shafts, is smaller than an area of the moveable member, as viewed along the plane.

13. (New) An apparatus, comprising:
a movable member that is supported by at least a first shaft and a second shaft; and
a hybrid optical module having a light emitting and receiving device mounted on said movable member,
wherein said hybrid optical module is moved along said first shaft and said second shaft by said moveable member to perform a tracking operation on an optical medium,
wherein a portion of said hybrid optical module, which is closer to said first shaft, is cut out in substantially parallel with said first shaft, and

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wherein said portion of said hybrid optical module is cut by an angle that is substantially equal to an incident angle of an optical path with respect to a tracking direction of the optical medium.

14. (New) The apparatus according to claim 13, wherein the hybrid optical module integrates optical components, and.

wherein the optical components are formed on a substrate.

15. (New) The apparatus according to claim 14, wherein the substrate and the optical components are housed in a package.

16. (New) The apparatus according to claim 15, wherein an area of the package, as viewed along a plane containing the first shaft and the second shaft, is smaller than an area of the moveable member, as viewed along the plane.

17. (New) The apparatus according to claim 13, further comprising:
a spindle on which the optical medium rotates; and
an objective lens for directing light towards the optical medium,
wherein the hybrid optical module is disposed completely between the first shaft and a plane intersecting an optical axis of the objective lens and a rotational axis of the spindle.

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18. (New) The apparatus according to claim 17, wherein the spindle is disposed closer to the second shaft than to the first shaft.

19. (New) The apparatus according to claim 13, wherein the hybrid optical module is pentagon-shaped.

20. (New) The apparatus according to claim 18, wherein the hybrid optical module is pentagon-shaped.